

Digital projectors making grand entrance at movies

October 29 2008, By Andrew D. Smith

Digital projectors should soon replace film on more than 20,000 of North America's 42,000 movie screens.

The change will save studios millions, let theaters show three-dimensional films and boost sales for digital cinema champions such as Texas Instruments Inc.

"This is the biggest technological change in the theater business since the introduction of sound," said John Fithian, president of the National Association of Theater Owners.

Viewers won't notice much difference when they see regular movies, but early signs suggest they'll love the 3-D.

The handful of recent movies shown in 2-D and 3-D did anywhere from two to four times as much business per screen in 3-D - even though limited 3-D seating meant some moviegoers were turned away.

Viewers will score tickets more easily as digital projectors proliferate, and they'll find plenty of shows to watch.

Studios plan to release two more 3-D films this year - the cartoons "Bolt" and "The Nightmare Before Christmas" - and 14 more in 2009.

Even viewers who dislike 3-D may benefit from digital projection, for it will bring increased variety to theaters.

The only way to get film to a projector is to print it, package it, ship it and then thread it into the machine.

Special one-time showings - and even limited runs - cannot justify the time and cost.

Digital movies, on the other hand, move almost as quickly and as cheaply as the videos on YouTube. The digital format practically demands special showings.

It also invites live event coverage.

Theaters have already drawn crowds with musical events that range from rock concerts to operas. The NBA's Dallas Mavericks even beamed one of their games, shot in 3-D, to a local movie theater.

As more theaters get digital projectors, expect far more experiments.

"While it's not unusual for movies to be produced in 3-D, there is a market for other types of 3-D entertainment that is ready to take off," said Mavericks owner Mark Cuban.

The Mavs broadcast "was a huge success," he said. "Fans loved it, 3-D glasses and all, and have asked for more. We have seen the same demand for other types of content as well."

Texas Instruments, which makes the digital light processing chips that power 99 percent of the digital projectors in theaters, has been promoting its technology for a decade, but a variety of obstacles delayed the transition.

Even with volume discounts, a complete digital projection system costs \$70,000 per screen. At that rate, total transition will exceed \$7 billion

worldwide.

Theater owners have long claimed that those costs dwarf the financial benefits to them.

Studios, on the other hand, stand to profit from the digital transition.

They pay about \$1,000 to print and handle a single copy of a movie. Worldwide industry film costs probably top \$1 billion per year.

The studios have thus agreed to help finance digital projectors by paying a "digital print fee" equal to the cost of a film print whenever it sends a digital, rather than film, copy of a movie to a theater.

Theaters that borrow money to go digital get heavy subsidies to pay off their loans. Other theaters continue with business as usual.

"This model makes sense for everyone. Studios, theaters and viewers all win," said Travis Reid, chief executive of Digital Cinema Implementation Partners, a consortium formed to negotiate with studios for the three largest U.S. chains, AMC, Regal and Cinemark.

For Texas Instruments, the digital transition vindicates an ambitious dream and a lot of work.

The relatively small number of movie screens will limit the direct financial benefit to TI, even if the company's DLP chips end up in every auditorium in the world.

But the indirect impact will be far larger.

"The work we've done for theaters has improved the quality of the products we can offer to consumers and businesses," said Doug Darrow,

TI's brand and marketing manager of DLP products. "This is a boost for our entire DLP division."

© 2008, *The Dallas Morning News*.

Visit *The Dallas Morning News* on the World Wide Web at

www.dallasnews.com/

Distributed by McClatchy-Tribune Information Services.

Citation: Digital projectors making grand entrance at movies (2008, October 29) retrieved 19 September 2024 from

<https://phys.org/news/2008-10-digital-projectors-grand-entrance-movies.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--